

Kitsap County Health District

100 Austin Drive
Bremerton, WA 98312



June 28, 2000

Mr. Larry J. Tucker
Engineering Project Manager
Engineering Field Activity Northwest
19917 7th Avenue NE
Poulsbo, WA 98370

RE: GORST CREEK LANDFILL SITE ASSESSMENT REPORT

Dear Mr. Tucker:

The Bremerton-Kitsap County Health District has reviewed the Site Hazard Assessment (SHA) completed by Hart Crowser and offers the following comments. The Health District is of the opinion that residential values, not industrial, should be used for evaluating this site and its impacts. While the landfill property would be industrial, there are residential properties in the vicinity of the site that make using residential values appropriate. Also, the Health District is of the opinion that MTCA Method A and Method B values should be used instead of Method A and Method C values used by Hart Crowser in the SHA.

The Bremerton-Kitsap County Health District appreciates the opportunity to comment on this project. Should you have any questions about this or any other matter related to the Gorst Creek Landfill please direct these comments to John Kiess (360) 692-3611, extension 237.

Sincerely,

ORIGINAL COPY SIGNED

Jan Brower
Solid and Hazardous Waste Program Manager

Cc: Mike Means, BKCHD
John Kiess, BKCHD
Scott Daniels, BKCHD
BAWL FILE

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POULSBO ANNEX
Solid and Hazardous Waste Program
On-Site Sewage / Water Quality Program
19540 Front Street
Mailing Address: P.O. Box 1076 - Poulsbo, WA 98370-0050
(360) 692-3611 FAX (360) 692-6684

Response to August 18, 2000 Comments on Ecology's Comments on the Gorst Creek Landfill Site Hazard Assessment

The comments are numbered to correspond with the original comments and the Navy's August 18, 2000 response to those comments.

G-1: The issue in dispute is whether "industrial" or "residential" property designation is appropriate for this site under the Model Toxics Control Act (MTCA). The Navy points out that the property is presently zoned as "urban reserve" and that MTCA regulations provides that a site does not have to be zoned with a designation of "industrial" to qualify for that designation. MTCA goes on to describe six characteristics that would qualify a site for industrial classification (WAC 173-340-745 (1) (a) (i)). Among the characteristics are: that the site has controlled access so that the general public is not allowed on the property (i.e. the general public is not likely to be exposed), that operations are often characterized by use and storage of chemicals, noise, odors and truck traffic (i.e. there is an active industrial "look and feel" to the site), and that the surface of the land is often covered with paving or buildings (i.e. exposure of the soil is minimized). When those standards are applied here, the subject site fails all three of these tests: First, the site is not completely fenced and the public can gain ready access to the eroding landfill mass. Second, there are very limited commercial activities on the property and the landfill portion has no activity occurring and no auto parts stored thereon. Finally, there are very little paving or buildings on the property and the landfill portion has no paving or buildings on it.

The Navy's response describes adjacent land uses. It appears that those comments are in response to Ecology's observation that most of the surrounding properties are residential. In MTCA regulations (WAC 173-340-745 (1) (c)) Ecology sets forth its expectations regarding industrial designation. It is in relation to those expectations that the observation that adjacent properties are residential (i.e. would also not designate as industrial) was made. It is easier to make the case that a property is industrial when it is in an industrial setting (e.g. the Tacoma tide flats or Harbor Island) than when it is the sole industrial property. The lack of extensive industrial development in the vicinity of the subject site adds to the difficulty in designating it as industrial.

In summary, I am unaware of any sites with the character of this one that have designated as industrial. I am, however, aware of sites that to a much greater degree approached fitting the industrial designation that have not been so designated. Consequently, Ecology considers this site, for the purpose of setting cleanup standards, to be residential.

G-2: The subject site is a landfill that has not been properly closed and is eroding. In addition, the Site Hazard Assessment (SHA) found PCB in the soil above the applicable regulatory standard. In addition, the results of other analysis were inconclusive due to the laboratory detection levels being too high. Consequently, the site can not receive a determination of "no further action" (NFA). SHAs are typically performed by PLP's in order to obtain a NFA determination from Ecology. When a site fails to receive a NFA, the ranking of the site serves to prioritize the site for future work. In this case, the landfill is failing and future work is inevitable and arguably time critical. Given the analytical difficulties in the SHA and the inevitable need for remediation, Ecology is having difficulty understanding the Navy's position regarding having the site ranked. We fail to see what practical difference it would make if the site ranked "1" or "5" with regard to the chemical risk, for example, when it is obvious that work must occur to address the health and physical hazard posed by the eroding landfill. We would appreciate clarification from the Navy explaining what would be gained by ranking the site once sufficient data was available from the remedial investigation.

G-3: There has yet to be a hydrogeological assessment of this site. It is therefore not yet clear whether the water in the creek is representative of groundwater beneath and down gradient of the landfill or in what way it might be representative for a given contaminant. For example, it is not known at present whether the creek water is a 10-fold dilution of contaminant X or a 100-fold dilution. In addition, the Navy indicated in its response to Ecology's comment S-3 that in June there was a flow of approximately 10 gallons per minute 100 feet upstream of the landfill, no flow going into the atrium drain at the upstream side of the

the landfill. This would indicate that the creek has gaining and losing reaches in the vicinity of the landfill. This data would refute the notion proposed by the Navy that the creek is only a gaining stream in the vicinity of the landfill. Of course, without the installation of groundwater wells and a proper hydrogeological assessment, it is not possible to know much about the relationship of groundwater to the creek. Regardless, Ecology was merely acknowledging in the original comment that groundwater some distance from the site does not appear to be contaminated. **Peter, I don't understand this last sentence in relation to the rest of the comment; are we saying that they need to do RI/FS so we can get that data on the gw, or that all of the above is just an academic exercise?**

G-4: The Navy appears to be misrepresenting the original comment. The comment was that the surface water quality impacts identified upstream of the landfill "may not be the Navy's responsibility". This is quite different than stating that they "are not the Navy's responsibility". It is possible that the extent of the site is presently misunderstood and that the current or prior owners of the property and/or operators of the landfill placed, or caused to be placed, contaminants upstream of the identified landfill mass. Consequently the extent of the site may, in the course of a remedial investigation, come to be redefined and the surface water quality impacts detected may, in fact, be due to conditions present on the redefined site.

S-1: For the reasons given in G-1 above, Ecology considers the applicable site cleanup standard to be residential. Furthermore, since landfills ~~are not simple and straightforward sites but rather~~ are complex sites and have the potential for numerous contaminants, the correct standard is MTCA residential Method B, not Method A. On this basis, the PCB found in the landfill surface soil in samples GL-SS-03, GL-SS-04, and GL-SS-05, which were 0.37mg/kg, 0.56 mg/kg, 0.14 mg/kg respectively, is in excess of the MTCA Method B PCB cleanup standard of 0.13mg/kg.

S-2: Ecology was noting in this comment that total mercury above the PQL and the Surface Water Quality Standards was found upstream of the landfill mass. It is agreed that the concentration of total mercury was lower (by how much can not be determined) down stream of the landfill. The presence of mercury in excess of the standard raises questions, for example, is there a source of mercury upstream of the site that is unrelated to the site or has the extent of the site been misidentified?

S-3: Ecology was pleased to learn that the original surface water pH data could have been in error. However, at 8.4, the pH obtained at the upstream sampling point is still uncharacteristically high for a stream in western Washington. [Peter, according to what source?] This is additional evidence, along with the surface water mercury data, to suggest that there is a source of contamination upstream of the landfill mass. [Peter, what is the significance of a possible upstream contamination? That the site may be bigger? Or that there may be a second site also belonging to the Navy?] In addition, it is noteworthy that the surface water pH decreased to 7.0 immediately below the landfill. This would indicate that acidity is entering the creek/groundwater as it travels beneath the landfill. [Peter, what is the significance of this? That the landfill is increasing the acidity?]

landfill, and a flow of 4 gallons per minute flowing out of the pipe at the base of the landfill. This would indicate that the creek has gaining and losing reaches in the vicinity of the landfill. This data would refute the notion proposed by the Navy that the creek is only a gaining stream in the vicinity of the landfill. Of course, without the installation of groundwater wells and a proper hydrogeological assessment, it is not possible to know much about the relationship of groundwater to the creek. Regardless, Ecology was merely acknowledging in the original comment that groundwater some distance from the site does not appear to be contaminated.

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